

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

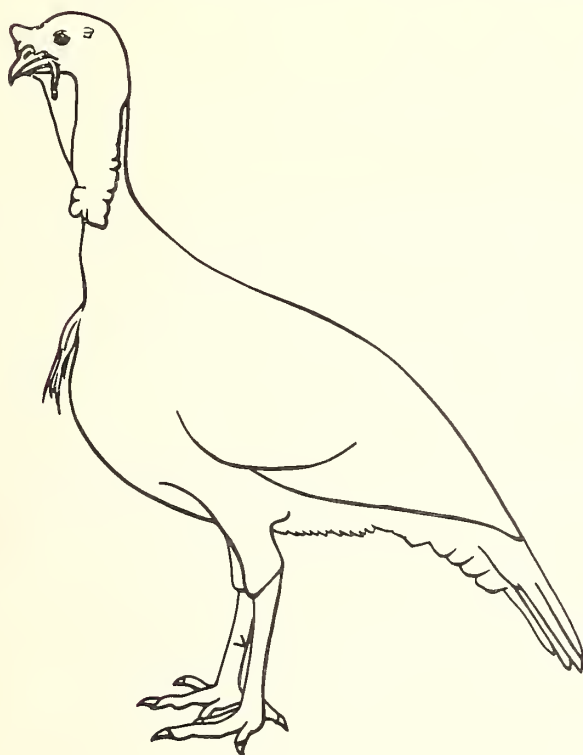
UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Administration
Bureau of Animal Industry

An Outline for Selecting Breeding Turkeys

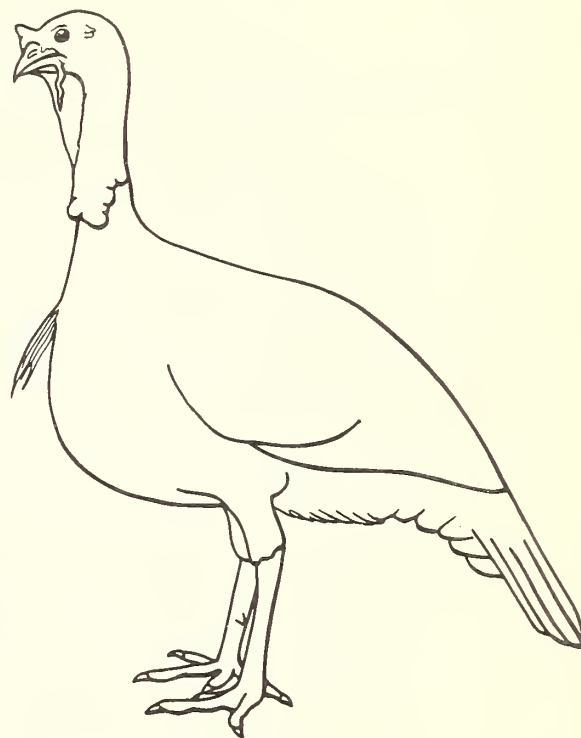
by S. J. Marsden, Poultry Husbandman and
Sam A. Moore, Poultry Coordinator.

I. Carriage and Action (especially important in the selection of males)

- A. Carriage, the bird standing or walking but not strutting: Birds with good balance stand high at the shoulders, the back sloping from front to rear at a 35° - 40° angle. Reject for front heaviness.
- B. Action: Gait free, active, and easy. Reject for waddling, limping, paddling (swinging feet outwards), or crippled condition.



Good balance



Poor balance

Figure 1. --Drawings representing turkeys with good and poor balance.

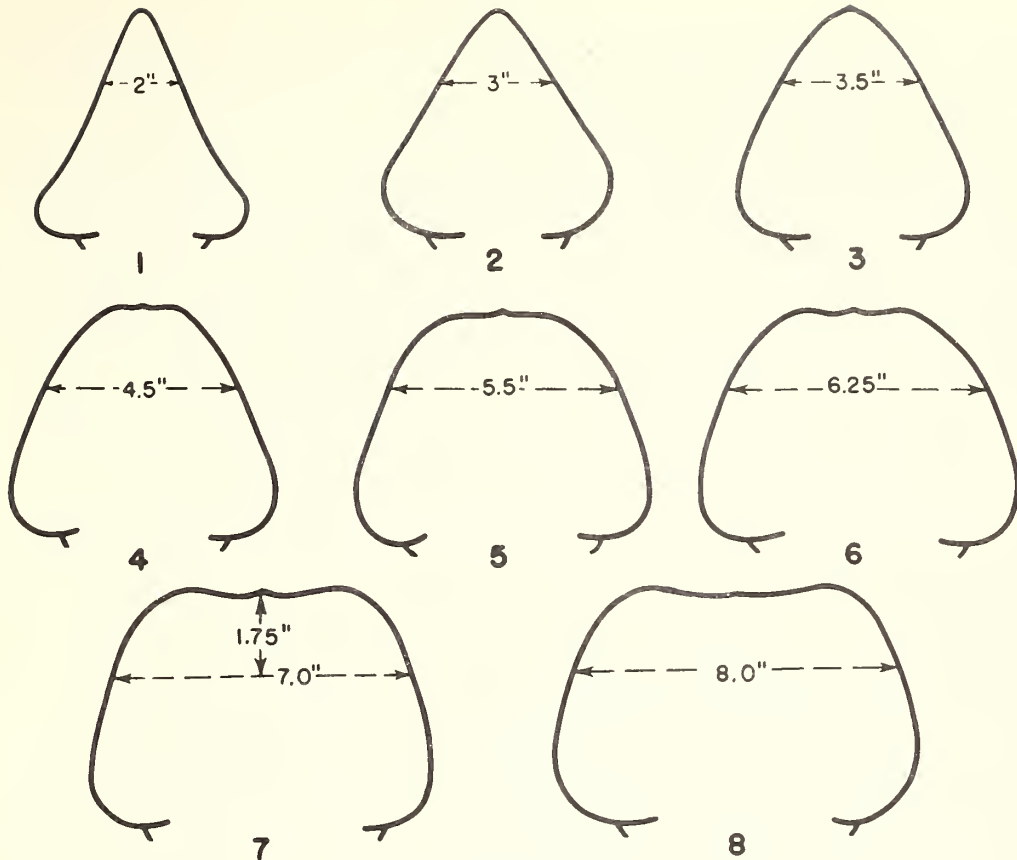
II. Head and Neck

- A. Bright, round, prominent eyes of proper variety color. Reject if eyes are off-colored, elongated, dull, sunken, injured, blind, or missing.
- B. Short, curved beak. Reject for ostrich beak, cross beak, and elongated beak, but not for having been properly debeaked.
- C. Rugged but refined appearance, free from excess flesh. Reject for coarseness or weak appearance.
- D. Head of good depth and breadth, not elongated. Reject for crow head.
- E. Neck straight and relatively short. Reject for excess length or deformity.

III. Back: Wide and flat including part over ribs. Reject for roached (arched) back, crooked back, narrow heart girth, torn skin, or rumplessness.

IV. Breast

- A. Wide but not excessively so (fig. 2). Reject if too narrow or too wide and flat.
- B. Parallel to back. Placing one hand on back, the other on breastbone determine whether rear end of keelbone appears pushed in or dropped down away from the parallel position. Reject for either condition.
- C. Smoothly fleshed, width carried well back to rear of keel but not so much as to interfere with locomotion. Reject for heart-shaped breast (very wide in front, very narrow at rear).
- D. Breastbone (keel): straight, moderately long, free from knobiness. Eliminate keels crooked, noticeably curved, too short, decidedly rocker-shaped, decidedly dented, or possessing a knob which is the result of failure of flesh to surround the front point of the keel. Keel bone should be about the same length as the shank.
- E. Check crop region and reject for signs of pendulous crop.



SEE EXPLANATION ON PAGE 4

Figure 2. Cross sections of turkeys' bodies at the widest point of the breast slightly to rear of front tip of keel bone. No. 1 is too narrow, No. 2 is acceptable, and No. 3 is ideal, conformation for well-matured turkeys of both sexes and all varieties except those classified as broad-breasted. No. 3 also illustrates minimum width for turkeys of the broad-breasted strains and varieties, and Nos. 4, 5, and 6 are desirable widths for these turkeys, No. 5 being the ideal. Nos. 7 and 8 represent exceptionally wide flat breasts and relatively shallow bodies which are usually accompanied by undesirable breeding and production qualities.

V. Legs and Feet

- A. Drumsticks and thighs plump, well-meated, and of sufficient size to provide a well-balanced carcass. Reject if undersized or straight-sided.
- B. Shanks of moderate length, strong, sturdy, not too short or too long, not coarse. Reject for legginess, abnormally short shanks, twisted

shanks, tendencies toward bowlegs, knock-knees, slipped tendons, swollen or malformed hocks.

- C. Reject for bumblefoot, stubs or feathers on shanks or feet, more or less than four toes on each foot, off-colored or crooked toes. One or two slightly crooked toes permitted in females but not in males.

- VI. Wings and Tail. Reject for split wing, slipped wing, completely missing, twisted, or off-colored main wing and tail feathers. Wings with primaries clipped or last segment surgically removed are permitted in both sexes, but are not desirable in males.

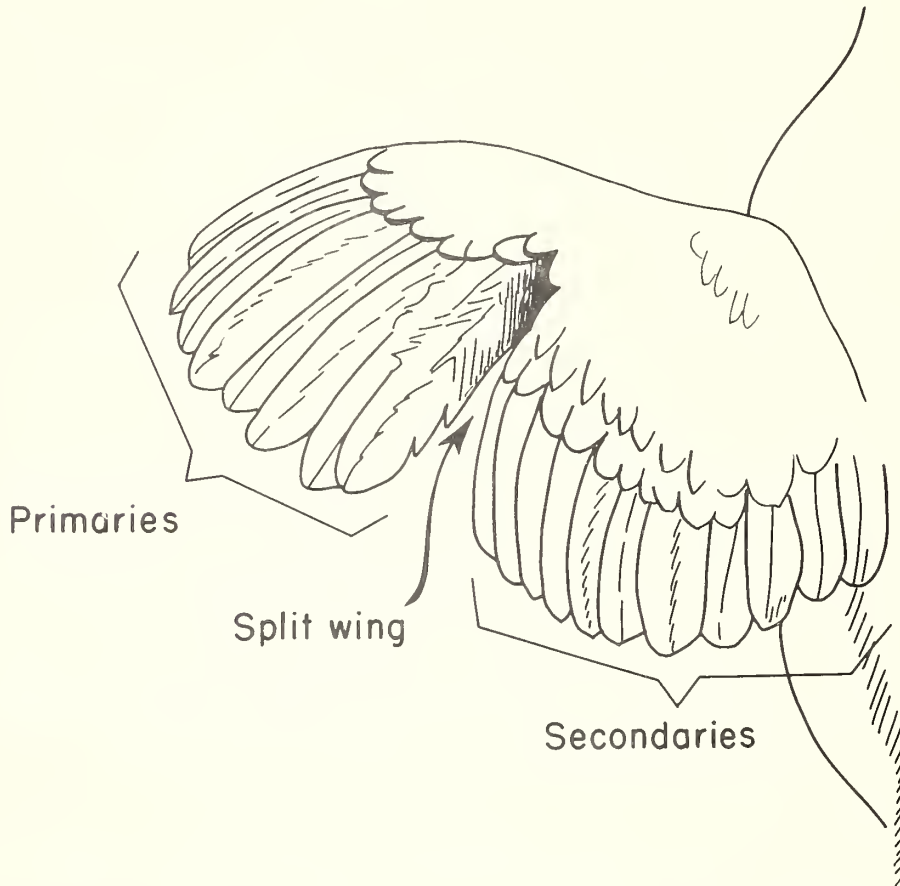
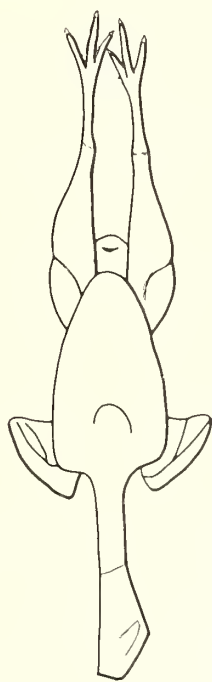


Figure 3. Drawing of split wing showing separation of primary and secondary feathers.

VII. Balance

- A. Depends primarily upon leg placement; poorly balanced birds have legs placed too far back.
- B. Is indicated by keel-leg relationship when bird is suspended by the legs, the body vertical and relaxed. Well-balanced birds show no decided gap between drumsticks and rear end of keel. Reject birds with a conspicuous gap, a broken or notched profile. Keel should extend well back between the legs.

VII. Skeletal Proportions: Body of moderate depth, keel as long as shank or nearly so in birds under 28 weeks of age, slightly longer than shank in birds 28 weeks and older. Body depth should be about one-fifth greater than length of the keel in all except Beltsville Small Whites in which it should be about one-fourth greater. Measure by calipers or by spread hand. Reject for shallow body or short keel.



YOUNG HEN

Good balance
Breast of good uniform
width and good length



YOUNG TOM

Good balance
Ideal broad breasted
conformation



YOUNG TOM

Good balance
Keel and back parallel
Keel extends between thighs

Figure 4. Drawings representing desirable body types



YOUNG TOM
Poor balance
Lack of width of rear of keel
Neck too long



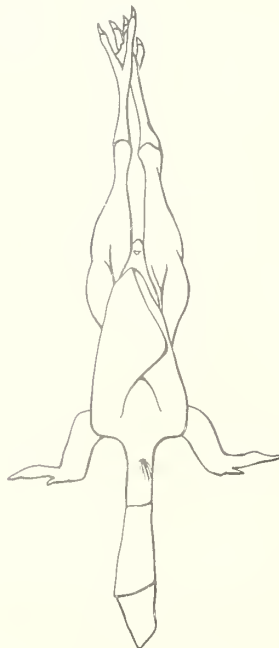
YOUNG TOM
Poor balance
Knob
Neck too long



HEN
Roachback
Decidedly rocker-shaped keel
Short keel



TOM
Rear of keel cut in (keel and
back not parallel)
Deficient legs
Severe roost dent



TOM
Crooked breastbone
Mild Perosis (leg deformity)



TOM
Crooked breastbone
Knob

Figure 5. Drawings showing defects in conformation

- IX. Size: Check weight according to variety and age as shown in table 1. Reject for decided underweight or, in small varieties, decided overweight.

Table 1.--Suggested minimum body weights for standard and Beltsville Small White varieties and suggested maximum body weights for small varieties of turkeys

Sex and age	Minimum body weight				Maximum body weight		
	Broad- Breasted Bronze	Standard varieties other than Bronze	Standard Bronze	Beltsville Small White	Beltsville Small White	Other small varieties	
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
Toms:							
24 weeks-----	18	14	15	12	16	17.5	
26 weeks-----	20	15.5	16.5	13.5	18	19.5	
28 weeks-----	22	17	18	15	20	21.5	
30 weeks-----	23	18	19	16	22	23.5	
32 weeks-----	24	19	20	17	23	24.5	
Hens:							
24 weeks-----	12	8.5	9.5	7	10	11	
26 weeks-----	12.5	9	10	7.5	10.5	11.5	
28 weeks-----	13	9.5	10.5	8	11	12	
30 weeks-----	13.5	10	11	8.5	12	13	
32 weeks-----	14	10.5	11.5	9	12.5	13.5	

- X. Color: Conforming reasonably well to standard requirements. Reject for all standard disqualifications relating to color of plumage*, legs, and feet, and also for solidly off-colored beak or eyes. Reject males of Bronze, Bourbon Red, Narragansett, and other parti-colored varieties that do not have male-colored plumage and females that do not have female-colored plumage such as those lacking the normal white edgings on breast and body feathers. Reject Bronze turkeys for completely black backs and complete or almost complete lack of body bronzing and tail penciling.

*Except in white varieties, slight black on quills of primaries or secondaries and black or gray ticking are tolerated.

XI. Quick Market maturity: Quick maturing turkeys are more efficient in the use of feed.

- A. The state of maturity can be checked accurately and effectively only at 22 to 26 weeks for small-type and 24 to 30 for medium- and large-type turkeys. Quick maturing specimens will have the most market finish at the ages indicated.

Reject birds not showing proper degree of maturity. Small-type turkeys should finish to U. S. Grade A quality or better within 22-26 weeks; large- and medium-type birds within 24-30 weeks. In the absence of a thorough check as above, eliminate all obviously late-maturing specimens (those that are of only U. S. Grade C quality at the ages mentioned or later).

B. Market condition is indicated by:

1. Fat in skin. Have an assistant hold a bird so that breast skin is relaxed, then pluck a few feathers from the sparsely feathered area between the two feather tracts of the breast at a point just to rear of a line drawn from shoulder to front point of keel. Take a fold of the skin between thumbs and forefingers of both hands. Exceptionally well-finished turkeys formerly designated as U. S. Grade AA in finish will have a thick creamy skin, a fold (a double thickness of skin) of which will be about 0.14 inch or more thick; well-finished turkeys equal to U. S. Grade A, 0.07 to 0.13 inch thick; fairly well-finished turkeys, equal to U. S. Grade B, 0.04 to 0.06 inch thick; and poorly-finished turkeys equal only to U.S. Grade C, 0.03 inch or less in thickness. This test is effective only at the point specified. Ignore fat in skin at other places on the body.
2. Few pinfeathers too short to be plucked cleanly. These feathers protrude less than about 1/8 inch. U.S. Grade A dressed turkeys are permitted to have a few short unpickable pinfeathers, but only a very small number on the breast. In the live bird, check for pinfeathers too short to be plucked on drumsticks, shoulders, and one of the two narrow feather tracts that run parallel to the keel bone and just above it on either side.

